

PA-DC

<b>QUERY CONTROL FORM</b>		<b>RTIS USE ONLY</b>	
Application No.	00876,290	Prepared by	ACTark
Examiner-GAO	Thomas J. O'Leary	Date	4/5/04
		No. of queries	50
		Tracking Number	05913237
		Week Date	3/1/04

<b>JACKET</b>					
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449		
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b		
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract		
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs		
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other		

<b>SPECIFICATION</b>		<b>MESSAGE</b>
a. Page Missing	① Claim 11 depends on itself claim 11.	
b. Text Continuity	② PTO-1449: Please either initial or line through citations. Copy provided.	
c. Holes through Data		
d. Other Missing Text		
e. Illegible Text		
f. Duplicate Text		
g. Brief Description		
h. Sequence Listing		
i. Appendix		
j. Amendments		
k. Other		
<b>CLAIMS</b>		
a. Claim(s) Missing		
b. Improper Dependency	initials AC	
c. Duplicate Numbers		
d. Incorrect Numbering		
e. Index Disagrees	RESPONSE The Examiner was authorized by Applicant's representative, Gary Huntlycutt (Reg. No. 20,250) to make the appropriate change to claim 11. The change is reflected by a copy of the claim included herein.	
f. Punctuation		
g. Amendments		
h. Bracketing		
i. Missing Text		
j. Duplicate Text	The Examiner also initialed the IDS copy filed January 12, 2004.	
k. Other	initials EO	

50 Ωcm, and said source, drain, and their extensions  
are made of p-type silicon.

9. The circuit according to Claim 1 wherein said  
semiconductor of the first conductivity type has a  
5 dopant species selected from a group consisting of  
arsenic, phosphorus, antimony, bismuth, and lithium,  
while said source, drain, their extensions, and said  
regions of higher resistivity within said semiconductor  
of the first conductivity type have a dopant species  
10 selected from a group consisting of boron, aluminum,  
gallium, indium, and lithium.

10. The circuit according to Claim 1 wherein said gate has  
a narrow dimension smaller than about 0.2 μm.

□  
15 11. The circuit according to Claim ~~11~~<sup>1</sup> wherein said regions  
of higher resistivity enhance the gain of the lateral  
bipolar transistor and thus the ESD protection of said  
MOS transistor, especially the current needed for  
initiating thermal breakdown, without decreasing latch-  
up robustness or increasing inadvertent substrate  
current-induced body biasing of neighboring  
transistors.

E.O.  
A.U. 2015  
4/22/04

20 12. A method of increasing the p-type semiconductor  
resistivity in selected regions under the active area  
of a NMOS transistor, said regions stretching laterally  
25 between the inner borders of the extended and recessed  
regions of source and drain, respectively, and  
vertically from a depth just below the deletion regions  
of said source and drain to approximately the top of  
the channel stop region, comprising the steps of:  
30 depositing a photoresist layer over said transistor  
and opening a window in said layer over said